REMARKS

In the Office Action mailed March 30, 2009, the Examiner rejected claims 1 and 3-12 under 35 U.S.C. 103 as obvious over Worley (US 2003/0054141).

Applicant has amended claim 1 of the present application to traverse the rejection based on prior art.

Worley teaches that the phase change material itself can be capable of cross-linking in order to increase its toughness or its resistance to heat moisture and chemicals. The crystalline alkyl hydrocarbons and the salt hydrate phase change materials used in the present application are not capable of cross-linking themselves into a polymer. However, in order to prevent dissolution while in their liquid stages and to contain them in the polymer, these phase change materials need to be embedded in a polymeric structure which is cross-linked around them. Therefore, the use of a cross-linking agent is crucial. The phase change materials need to be applied to the system while in their liquid stage, in order to occupy the maximum possible space within the structure. If they would be applied in a solid stage, the cross-linked structure around them would later be ruptured due to the expansion in volume when melting into a liquid.

Worley teaches that the polymer may be capable of cross-linking in order to increase its toughness or its resistance to heat moisture and chemicals. Furthermore. Worley teaches that after the polymeric blend has been applied to the substrate the polymers cross-linking feature is used to bond to the substrate (0058). However, Worley does not teach that the cross-linking feature is used to embed the phase change material into the polymer structure and to prevent the dissolution of the phase change material while in its liquid stage in this way.

In addition, Worley teaches a separate containment structure that encapsulates, contains, surrounds, absorbs or reacts with the phase change material. This containment structure may serve to reduce or prevent leakage of the phase change material from the coated article during end use (0043). In the present application no separate containment structure is used in addition to the polymer.

Furthermore, in the art of the present application, cross-linking the elastomeric material around the phase change material does not lead to the changes in the molecular weight or the chain structure of the elastomeric material taught by Worley ((0052).

The claims as amended are now believed to be in condition for allowance and early action to that effect is earnestly solicited.

Respectfully submitted,

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